Food and Agriculture Organization of the United Nations

How Ecuador's National Forest Monitoring System has enabled access to results-based payments

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Context

Since 2008, Ecuador has developed several initiatives to implement and strengthen the country's National Forest Monitoring System (NFMS) to improve the mechanisms for collecting information related to its national forest heritage, recognizing nature as a subject of rights and declaring forests as fragile ecosystems that require special treatment.

The NFMS plays a crucial role in supporting the implementation and evaluation of the effectiveness of policies and actions aimed at the conservation and management of natural resources. Through the accurate and updated generation of activity data, the NFMS contributes significantly to the reporting of periodic information. These data are not only essential for the design and monitoring of the national development plan, but they also provide key inputs for the reporting of Sustainable Development Goal (SDG) indicators. This information is essential for the preparation of reports related to the Global Forest Resources Assessment (FRA) and the presentation of national and international greenhouse gas (GHG) reports.

In 2015, Ecuador submitted a Forest Reference Emission Level (FREL) with a national scope to the United Nations Framework Convention on Climate Change (UNFCCC) – the country's first.

In 2016, the Ministry of Environment, Water and Ecological Transition of Ecuador (MAATE) adopted a ministerial agreement to formalize the REDD+ Action Plan, integrating guidelines for the implementation of the NFMS.

In 2017, a comprehensive legal report was developed, including:

- procedures for data accessibility and use by the different entities involved in monitoring functions, with a focus on the preparation of **GHG** inventories and forest-related **measuring, reporting and verification (MRV)**;
- main platforms, forums and other mechanisms that facilitate data sharing for the NFMS; and
- gap analysis and needs related to data accessibility procedures.

Actors and stakeholders

The NFMS was developed for providing the necessary information to design, implement and evaluate the effectiveness of policies, measures and actions related to conservation, sustainable forest management, restoration, forest governance, natural resource management, land management, land use and land use change.

As in many countries, the NFMS has evolved to become a much broader and more versatile instrument. Although its creation responded to the need to monitor and report actions aimed at reducing GHG emissions from deforestation and forest degradation, the scope of the NFMS has transcended those initial limits.

Today, the NFMS not only contributes to Ecuador's efforts to combat climate change, but also provides valuable information for a variety of national and international reports.

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Objectives

The objectives are to collect and generate periodic, measurable, reportable and verifiable information to evaluate the management of forests, other natural ecosystems and their associated biodiversity, in order to determine the state of conservation of national forest heritage and facilitate the generation of national and international reports on emissions and removals of GHGs related to changes in land use and forestry.

Impact

Ecuador was among the first countries to finalize the preparation instruments and showcase outcomes. The country submitted **three emission reduction (ER) reports** (for the 2015–2016, 2017–2018, and 2019 periods) to the German and Norwegian cooperation initiative known as **REDD+ Early Movers (REM)**. As a result of these endeavours, the country secured USD 44.7 million in payments based on outcomes, attributed to the decrease in emissions amounting to 16 251 899 tonnes of carbon dioxide equivalent (tCO2eq).

In 2014, Ecuador offered 100 percent of all ERs reported to the **UNFCCC** to the **Green Climate Fund's results-based payment** (**GCF RBP**) pilot programme. As of September 2022, the GCF had approved a total of 4.8 million tCO2eq, of which 3.6 million tCO2eq qualified for payments – translating to a deduction of 75 percent of the offered ERs and resulting in a disbursement of USD 18 571 766.

In 2021, **Emergent** (a non-profit intermediary working with tropical forest countries and buyers to mobilize finance for REDD+ results) signed a **letter of intent** (**LOI**) with five jurisdictions (including Ecuador), indicating an interest to sign additional agreements soon. As of September 2022, Ecuador had submitted an **ART-TREES** concept to generate verified emission reduction and removal credits by meeting precise and comprehensive requirements (ART-TREES refers to the Architecture for REDD+ Transactions - The REDD+ Environmental Excellence Standard).

As established in the terms of reference for the GCF RBP pilot programme, Ecuador will reinvest REDD+ RBPs to strengthen the implementation of REDD+ in **territories of Indigenous Peoples**, implement land-use plans and management plans at the local level, foster **public-private partnerships**, and provide further support to the **Socio Bosque Program**, in line with its current **nationally determined contributions (NDCs)**.

Success factors

Success factors include:

- **Country ownership and responsibility:** Within the framework of the UNFCCC, Ecuador has managed to develop the NFMS as a fundamental pillar to access RBPs, establishing a FREL, and creating a robust and transparent NFMS and safeguards information system (SIS).
- **Integration of and consistency with existing information sources:** Activity data used for the construction of Ecuador's first FREL was extracted from a historical time series of land-use maps developed by the Ministry of Environment (MAE) for the years 1990, 2000 and 2008, using the same source of data, minimum mapping unit, classification method and forest definition to ensure consistency. The same method of map comparison was used to obtain activity data per land-use change category (it should be noted that the forest-type stratification for the activity data and emission factors is consistent with the stratification used in the national GHG inventory).
- **Credibility through transparency and quality:** Ecuador has made significant progress toward achieving high-integrity MRV in the context of REDD+, providing accurate measurements, credible and reliable reference levels, and transparent data analysis. The country submitted a safeguards information system (SIS) summary (with online access) and a link to the REDD+ Action Plan on the information hub.
- **Collaboration at the international level:** Results-based payments complement other ongoing initiatives to help Ecuador implement its REDD+ Action Plan through the Global Environment Facility (GEF), REDD Early Movers (REM) and fishery improvement projects (FIPs).
- **Multipurpose approach:** The country's first NDC, submitted in 2019, includes a specific target for the land use, land-use change and forestry (LULUCF) sector (the reduction in gross emissions by at least 20 percent by 2025, compared with FREL 2000–2008).

Challenges

Strengthening the MAATE's NFMS (in terms of forest degradation monitoring) is a challenge because the monitoring of degradation has not been conducted previously on the regional or national scale. Technical capacities need to be strengthened within the ministry, as well as the use of higher-quality satellite images, the development of a methodology to measure degradation, and the implementation of efficient traceability and complaint mechanisms.

Related resources

Antecedentes Sistema Nacional de Monitoreo de Bosques

FP110: Ecuador REDD-plus RBP for results period 2014 (GCF)

From reference levels to results: REDD+ reporting by countries (FAO)

Platform access

https://snmb.ambiente.gob.ec/snmb

https://reddecuador.ambiente.gob.ec/redd

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